

## OBESITY: A NATIONAL SECURITY CONCERN

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USAWC STRATEGY RESEARCH PROJECT

**OBESITY: A NATIONAL SECURITY CONCERN**

by

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## **ABSTRACT**

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The average weight and body fat of Americans has been steadily increasing for several years, especially among children. To compensate, the Army altered the entrance requirements, allowing individuals previously considered overweight to enlist. This effectively moved responsibility for weight loss from the recruit to the Army, adding a new dimension to ensuring the health and welfare of these Soldiers as they work to meet Army standards. The increased weight and body fat has the potential to negatively impact the Army's ability to provide ready forces, not only through decreased physical fitness, but also through increases in other health concerns such as heart disease and high blood pressure. Since obesity is a continuing, if not worsening, trend these changes may be insufficient to insure adequate personnel strength numbers without "lowering the bar" again by relaxing the standards required for active duty Soldiers. This paper examines the impacts of the obesity issues plaguing America's youth on readiness as overweight individuals enter the Army. It also reviews policy actions taken by the Army to improve recruitment and retention rates, and the impacts from these actions on the health and readiness of the Army Soldier.





## OBESITY: A NATIONAL SECURITY CONCERN

The struggle with weight has been gaining attention throughout the United States and the world through reality television shows such as *The Biggest Loser*, Subway Restaurant's commercials featuring Jared, and more recently through First Lady Michelle Obama's "Let's Move!" campaign. Obesity is a condition that recognizes no boundaries. Obesity affects both males and females, people of all ages and national origins, and increasingly people of all income levels. Even the military services are not immune to weight issues within their active duty ranks.

Most weight issues are caused by an imbalance between calories consumed and calories expended. Today's hectic lifestyle, especially in families with dual-working parents, frequently results in a diet that includes more take-out, delivery and processed foods that are higher in calories, fats, sugars and sodium. This dietary trend, combined with reduced physical activity is a recipe for obesity.

Our national security is dependent upon the strength and readiness of our military; and the Army's readiness is dependent upon the ability and condition of each individual Soldier. Obesity threatens national security from several different perspectives. This paper analyzes the threat from three of those perspectives, reviews the actions the military has taken and provides recommendations for mitigating their impact. The first national security impact is the ability to recruit individuals that meet Army standards. As the population grows more obese, it becomes more difficult for the Army to maintain its force level. A second impact to national security is through the increasing number of active duty Soldiers that are now overweight, or no longer within the standards required by Army regulations. A third area of concern is the increase of

direct and indirect costs associated with health issues that are linked to overweight and obesity.

### Overweight versus Obese versus Fitness

Two terms frequently used to classify individuals that exceed a healthy weight are overweight and obese; both conditions are considered health threats. The most common method used to determine whether an individual is considered to be at a healthy weight is the body mass index, or BMI, which uses a ratio of weight to height. The Centers for Disease Control (CDC) defines overweight for adults as having a BMI between 25 and 29.9; while an adult with a BMI of 30 or higher is considered obese.<sup>1</sup> The CDC and most fitness professionals warn that BMI alone may be an inadequate measure since it does not consider the muscle mass contribution to weight for athletic or active individuals.

For the Army, overweight is determined by comparing a Soldier's weight against the weight tables found in Army Regulation (AR) 40-501, *Standards of Medical Fitness*. The weight ranges are adjusted for height, gender, and age. In addition to overweight and obese, the Army also uses the term overfat, which is based on a calculation used to estimate an individual's percentage of body fat using circumference-based measurements of neck, waist and hips. It is possible for individuals to be overweight but not overfat.

AR 40-501, *Standards of Medical Fitness*, defines obesity as "excessive accumulation of fat in the body manifested by poor muscle tone, flabbiness and folds, bulk out of proportion to body build, dyspnea and fatigue upon mild exertion, and frequently accompanied by flat feet and weakness of the legs and lower back."<sup>2</sup> Within the Department of Defense, the upper limits for body fat are 26% for men and 36% for

women. Individual services were delegated the authority to establish their limits to define overfat.<sup>3</sup>

Within the military profession using weight or body fat standards alone is not enough. The military places physical demands upon its members that are found in few civilian organizations. To account for these additional demands, each Soldier is required to complete a biannual physical fitness test that includes running, sit ups, and pushups. The standards for physical fitness requirements are codified in Training Circular 3.22-20, *Army Physical Fitness Readiness Training*. Mandated physical fitness is adjusted for the individual's age and sex.

### Obesity Statistics

The statistics for the number of obese children are alarming, and the numbers continue to rise. In 2008 almost 17 percent of America's children aged 2-19 were obese as compared to 14 percent in 2000, and only 10 percent in 1994.<sup>4</sup> When both obese and overweight children within the same age range are included the number increases to a staggering 31.9 percent.<sup>5</sup>

A chilling statement from a study published in 2010 by Mission: Readiness is that "today's children may be the first generation of Americans to live shorter lives than their parents."<sup>6</sup> The study also included an ironic conclusion that one of the contributing factors to childhood obesity is a program started in 1946 to help promote childhood nutrition. Congress initiated the school lunch program at the end of World War II at the recommendation of General Lewis Hershey, the Director of the Selective Service, to improve children's nutrition.<sup>7</sup> A 2010 University of Michigan study showed that children that ate school-provided lunches were almost 60 percent more likely to be overweight or obese than children who brought their lunch from home.<sup>8</sup>

The overweight and obese statistics for the adult population are just as alarming. More than two thirds of the adults in America, over 68 percent, currently have a BMI that exceeds 25.<sup>9</sup> The CDC reports that in 2009 nine states reported more than 30 percent of their populations as obese, and Colorado was the only state with less than 20 percent. That is a significant increase from the 2000 reports where there were no states that exceeded 30 percent and 28 states had fewer than 20 percent.<sup>10</sup>

The United States is not alone in its fight against obesity. The World Health Organization has described obesity as a worldwide epidemic and in 2002 began referring to the condition as “globesity.” Worldwide statistics show that as of 2005, seven countries had populations with more than 20 percent of population having a BMI of 30 or more. This is one chart where it is disheartening to see the United States leading the way, more than six percent ahead of the number two country, Mexico.<sup>11</sup>

Even within the military, the trend for increasing numbers of overweight individuals is apparent. The Department of Defense analyzed the results of overweight/obese medical diagnoses for all of the active component services from January 1998 through December 2008. Their results showed an increase in the combined services from 1.6 percent (25,652 military members) to 4.4 percent (66,786 military members) over that time period. Within the Army, the increase in overweight or obese Soldiers was similar, with more than double the number of Soldiers being diagnosed as obese in 2008. The most significant increase occurred in 2003, and the most common reason cited for the weight gain is stress and return from deployments.<sup>12</sup>

#### Army Fitness Standards

The Army’s mission is “to fight and win our Nation’s wars by providing prompt, sustained land dominance across the full range of military operations and spectrum of

conflict in support of combatant commanders.”<sup>13</sup> Paramount to the success of this mission is the training and ability of Army Soldiers, including their appearance, health, and physical fitness ability.

There are examples throughout history demonstrating a connection between physical fitness and military strength. For the United States military, this connection can be traced to 1775, when the Continental Congress required that “all able-bodied effective men between 16 and 50 years of age be formed into militia companies.”<sup>14</sup> During World War II, both Allied and Axis forces revised their weight and fitness screening procedures to enable individuals with certain weight and medical conditions to serve in different capacities. The Japanese military used a system with four categories, the lowest of which would mean rejection from service for the individual; however, “soldiers who would normally be denied the privilege of serving in the Japanese army would, as a result of this new classification system, be able to perform alternative duties, such as flying kamikaze missions.”<sup>15</sup>

The Army established its first tables with height-to-weight standards in 1887 for several reasons. First was the perception that a fit force presents a more professional appearance and is better able to defend the nation. Another was the opinion that fitness is related to overall health therefore fit Soldiers will have less health issues. The most important reason for Soldiers to meet weight standards was the correlation between weight and fitness, and the theory that physically fit Soldiers were better able to perform their duties. The weight-for-height standards were originally implemented to identify underweight individuals who might be suffering from malnourishment, tuberculosis or parasitic infections and would not be capable of meeting the physical demands of the

military. The standards have since morphed into a tool used predominantly to identify overweight individuals.

The Army first used maximum standards in 1960. One of the reasons is appearance and a perception that a “fit” looking force is a professional organization that is more capable of defending our nation. Current standards for fitness are provided by Army Regulation 600-9, *The Army Weight Control Program*. According to this regulation, the objective of requiring these standards is to ensure that Army personnel are able to meet the physical demands of their jobs under combat conditions. Excessive body fat is considered to demonstrate a lack of personal discipline, and be indicative of a poor state of health, physical fitness, or stamina.<sup>16</sup>

In 1980, President Carter directed a study on military fitness. As a result of this study, the Department of Defense (DOD) first established a policy to use body fat percentage as the determining factor for weight with the issuance of DOD Directive 1308.1, DOD Physical Fitness and Body Fat Program, in June 1981. It has been revised multiple times since then, and the current version was issued in June 2004. This directive established the DOD policy requiring all service members to maintain physical readiness using aerobic capacity, muscular strength and body fat composition as the basis for the determination. The DOD directive allowed the individual services to develop their own standards with the guidelines provided in the directive.

Prior to 1992, the Army considered overweight or overfat to be conditions that a recruit could correct with training and proper nutrition. After that time, studies indicated that by the age of 18 genetic tendencies and established patterns for poor eating habits and exercise were set and would be difficult to correct without the expenditure of

considerable resources,<sup>17</sup> emphasizing the importance of intervention and guidance at an early age.

First published in 1976, AR 600-9, *The Army Weight Control Program*, provides the current Army standards. The document identifies the purpose as insuring all personnel:

- (1) Are able to meet the physical demands of their duties under combat conditions.
- (2) Present a trim military appearance at all times.<sup>18</sup>

This regulation provides not only the height/weight tables that are used, but it also provides specific direction on how and where to use circumference measurements when a Soldier exceeds the weight tables.

Physical fitness tests within the Army have been in effect since 1907 when President Theodore Roosevelt initiated what was known as the Annual Test Ride for officers. After observing officers that were incapable of riding even short distances at an increased gait he announced that “all field officers of the line of the Army should be at all times physically fit and able to perform the duties pertaining to their positions.” The Secretary of War was directed to develop and institute mandatory testing for all officers. Those who failed to perform to the set standards were determined to be not qualified for active service.<sup>19</sup>

Concern over Army personnel becoming too sedentary and not maintaining proper physical fitness levels prompted a revision of AR 600-9, combining the Physical Fitness regulation and the Weight Control Program regulation. This new version introduced the first set of standards for active duty Soldiers, requiring those Soldiers to maintain more stringent standards than the ones used for accession. The regulation

made the tie between readiness and physical fitness that continues to be relevant today, that in order to maintain a combat effective force, every Soldier must be physically fit. It also linked weight control and physical appearance to readiness but placed a significant emphasis on the importance of physical appearance by stating:

The wearing of the Army uniform should be a matter of personal pride and satisfaction. Each soldier is a representative of the United States Government, and should have a physical configuration and posture when in uniform that is trim and smart. Waistlines that stretch the front of an otherwise well-fitting blouse or shirt, and “pot-bellies” detract from good military appearance.<sup>20</sup>

The current version (2006) still references the appearance aspect of the standard by requiring every Soldier to maintain a “neat and trim” appearance, but ties physical fitness to readiness by asserting:

An essential function of day-to-day effectiveness and combat readiness of the Army is that all personnel are healthy and physically fit.” Self-discipline to maintain proper weight distribution and high standards of appearance is essential to every individual in the Army.<sup>21</sup>

### Readiness Impact

Although appearance may be a contributing factor to establishing fitness criteria, the more important aspect relates to the impact overweight or obese Soldiers can have on readiness. The ability to maintain a physically fit force is directly tied to the U.S. National Security policy and is a fundamental tenet of the Army’s mission. Directly linked to the physical fitness capability is the need to not only recruit individuals that meet the Army weight and body fat standards, but ensure the standards are maintained while on active duty. With the increasing prevalence of obesity, this task becomes significantly more challenging.

The Accession Medical Standards Analysis and Research Activity (AMSARA) provides the DoD with an annual report evaluating accession standards. Their analysis



of fiscal year 2008 results identified exceeding weight or body fat limits as the most common reason for medical disqualification, with more than 21 percent of combined service applicants being rejected.<sup>22</sup> When weight issues are combined with other reasons for disqualification, such as criminal records, drug use, or medical conditions other than weight, 75 percent of Americans between the ages of 17 to 24 are unable to join the military.<sup>23</sup> Of the recruits that do meet the enlistment standards, many are not as physically fit as recruits in the past, and are incapable of completing the basic training fitness program. This is credited to more junk food and video games combined with the elimination of physical education/fitness classes from many school systems.<sup>24</sup> According to a fact sheet produced by the American Cancer Society, the American Diabetes Association and the American Heart Association 22 percent of American schools do not require participation in physical education and only 3.8 percent of elementary, 7.9 percent of middle, and 2.1 percent of high schools offer the opportunity to take physical education classes during the entire school year.<sup>25</sup>

The prevalence of obesity and overweight within the active component is also on the rise. A 1992 study by James Vogel noted that enforcement of military standards had “virtually eliminated” military obesity and therefore increased combat readiness.<sup>26</sup> By 2008, that statement was no longer true; almost 70,000 active duty service members, more than 4 percent of the force, had received a medical diagnosis of overweight. The Army contribution was 28,000 Soldiers.<sup>27</sup> The actions taken by Soldiers in order to meet weight standards frequently engage in disordered eating behavior and chronic dieting habits, a practice that was identified in a 2003 report by the Institute of Medicine.<sup>28</sup>

According to a December 2010 Army Times article, the practice has expanded to include starvation, dehydration, laxatives and in extreme cases, liposuction.<sup>29</sup>

While it is possible to be overweight, or overfat, by Army standards and still pass the physical fitness tests, there is a correlation between weight or body fat and fitness that can vary depending upon the tasks being performed. For example, an individual's ability to run decreases as body fat increases due to the increase in required muscle power. However, the same individual may be better able to carry an increased load in a backpack.<sup>30</sup> The link between body composition and physical fitness has been demonstrated by multiple researchers. Carrying excess body weight in the form of fat results in poor physical performance and adds to the load being carried without contributing to the force-producing ability.<sup>31</sup>

Since the events of September 11, 2001, the Army has been under a tremendous strain, both mentally and physically, from increased deployments. The current operational tempo is exacerbating the weight issue both through the stress of the continual deploy/redeploy cycle and the weight gain experienced during deployments. Deployed Soldiers have found that a lack of physical training time combined with buffet-style dining while deployed can create issues maintaining a healthy weight.<sup>32</sup>

The inability to recruit and retain sufficient personnel to maintain the Army's required force structure is only one of the areas impacted by weight issues. There are also direct and indirect costs associated with health issues and separation. DOD wide, approximately 1,200 service members are released prior to completion of their first year due to failure to meet weight standards.<sup>33</sup> Within the Army, the average cost for training

new recruits can be as high as \$75.2K.<sup>34</sup> Each service member released due to weight issues requires an additional recruit to fill the vacancy, effectively doubling the cost of that recruitment. For service members who are not released from their obligation, there is the cost of medical care associated with weight-related issues.

Excess weight and obesity have been linked to multiple health conditions including diabetes (type- 2), high blood pressure, heart disease, stroke, and certain types of cancer. One report indicates that as high as 70 percent of overweight individuals have at least one of these conditions and more than 30 percent of overweight individuals suffer from two or more of the conditions.<sup>35</sup> While statistics are not available that identify weight as a direct factor in the illness, the World Health Organization reports that worldwide three million deaths per year are caused by diabetes (type- 2) and 17 million people die each year from heart disease, stroke, and related cardiovascular issues.<sup>36</sup> A study by Columbia University's Earth Institute cited obesity as a primary factor in the heart disease death rate in Brazil, China, India, South Africa and the Russian Republic of Tartarstan.<sup>37</sup> Within the United States, conditions resulting from obesity are credited with a 27 percent increase in medical costs from 1987 to 2001 and in 2006 alone medical cost related to obesity were estimated at \$147 billion.<sup>38</sup> At their current rate of increase, the medical costs associated with obesity are projected to reach \$344 billion by 2018.<sup>39</sup>

Medical costs to the TRICARE Prime program for treatment specifically associated with overweight or obese issues is estimated at \$1.1 billion per year, while the costs associated with absenteeism and presenteeism add an additional \$105 million per year.<sup>40</sup> The direct cost of medical care is not the only cost associated with obesity;

there are indirect costs as well. Employers recognized as early as 1920 that “unfit men cost their companies [sic] time and money in the form of work-days lost and disability compensation.”<sup>41</sup> Since overweight employees are not as productive during their duty time there are also costs associated with presenteeism as well.

Another indirect cost is the psychological effects from obesity and the stigma associated with weight conditions. We live in a society where “we have this enormous bias against overweight and obese people, and we worship the pencil-thin stars.”<sup>42</sup> In a military environment, surrounded by physically fit colleagues, the negative association with being overweight can be multiplied.

By AR 600-9, *The Army Weight Control Program*, Soldiers that fail to meet the weight standards and also fail to meet the tape standards are evaluated for underlying medical conditions; if none exist they are placed in a weight control program. The program is administered at the unit level by a unit fitness trainer or a training noncommissioned officer. There is no requirement for these “trainers” to have special qualifications that enable them to safely direct a training program for an overweight Soldier, thus potentially placing the Soldiers in jeopardy of exercise related injuries and unsafe dieting practices.

### Policy Changes

There are several measures already being taken in both the civilian and military communities to help offset some of the impacts from a growing population. One major change is a substantial modification to the school lunch program to bring it more in line with current nutritional recommendations. The revised program provides additional servings of fruits and vegetables, reduces sodium content and replaces whole fat milk with low fat milk.

The Army has been attempting to maintain pace with changes in the population since the inception of the first weight-for-height tables. This has been done through measures such as altering the heights and weights within the tables, adding tables for women, allowing body fat calculations, and adjusting the allowable body fat percentages.

In 2007 the Army initiated a waiver program allowing applicants enlist without meeting the weight/BMI standards and giving them one year to become compliant. This in effect places additional responsibility on the Army to ensure that the recruits lose weight in a safe manner, while still training to the same standards as all other recruits. It also allows the recruits to complete their basic training and be moved to their first duty station while still not meeting Army regulations for weight, placing the burden for the recruits' success on the new command.

One of the more recent changes is a three-tiered approach being implemented throughout the training bases at the direction of Lieutenant General Mark Hertling, while serving as the Deputy Commanding General for Initial Military Training with Training and Doctrine Command (TRADOC). The first tier includes Army-wide improvements in the physical readiness program. In August 2010 TRADOC released Training Circular 3.22-20, Army Physical Readiness Training, replacing the 1992 training field manual. The new training circular emphasizes a "train as you fight" concept for physical training, evaluating the types of activities Soldiers should be prepared to accomplish and providing exercises designed to strengthen the muscles needed for these activities. The manual includes photographs and descriptions of each of the exercises. This included changes during basic training that removed much of the running and higher impact

activities common to the basic training of the past and replaced them with lower impact alternatives that are more relevant to the types of combat activities Soldiers may be expected to perform. The underlying goal of the changes were identified by the Army as an attempt to reduce the number of injuries occurring during training, and to compensate for the number of unfit recruits entering into the service. The modifications were applauded by the editor in chief of Prevention Magazine as being more in line with recommendations from the fitness industry to concentrate more on total body fitness and core training.<sup>43</sup>

The second tier includes providing athletic trainers at the training bases “to optimize training, reduce injuries and help in healthy recovery.”<sup>44</sup> The final tier includes what Lieutenant General Hertling calls the “Soldier Fueling Initiative” which modifies the type of meals provided in the dining facilities to include less fried foods and soda and more vegetables and milk. The menus are also clearly marked to help Soldiers identify the better low-fat choices. These changes will be expanded to all Advanced Individual Training dining facilities by February 1, 2011, and may also be implemented Army-wide. In support of this program, the Army Air Force Exchange Service is modifying the selections in their vending machines so that at least 50 percent of the choices will include healthier snack alternatives.

### Military Alternatives

There are alternatives available to the Army to help reduce the impact from overweight and obesity issues. The Army asserts more direct control over two of the three perspectives previously identified as impacting national security: recruiting individuals that meet Army standards and maintaining standards within the active force.

The third perspective, controlling direct and indirect costs, should automatically be achieved based on success with the first two areas.

One alternative to compensate for the increasing overweight and obese applicant pool is to relax the weight standards for recruits. This may potentially provide the greatest increase in available recruits; however this decision is not without potential consequences that also have an adverse impact on readiness conditions. Simply allowing overweight and overfat recruits fails to address either the lack of physical fitness associated with conditions or the potential long and short term health-related dangers.

Another alternative is to develop different standards for different positions within the Army. For example, identify support positions that would be non-deployable and allow those positions to have a higher weight-for-height or body fat standard. The standards should still remain within a level that minimizes the risk of health conditions associated with overweight. This alternative is supported by Department of Defense Instruction 1308.3, *DOD Physical Fitness and Body Fat Programs Procedures*, which authorizes the individual services to develop occupational-specific fitness requirements.<sup>45</sup>

While some may argue that the physical demands placed on Soldiers vary depending on their military occupation specialty, all Soldiers are required to be proficient in basic military tasks and may be called upon at any time to deploy into combat zones.

As quoted in Mission: Readiness's "Too Fat to Fight",

For office workers in civilian life, having a colleague who is overweight may raise the cost of their health care but is not likely to threaten their safety. But for military personnel the physical abilities of their colleagues can be the difference between life and death.<sup>46</sup>

Acceptance of a system that employs multiple weight and body fat standards could also impact the ability of all Soldiers to perform at the same level on military tasks, potentially requiring the Army to establish multiple standards for each military task.

A compromise, such as the waiver program initiated in 2007 is an alternative that has shown some success. Allowing recruits who exceed the weight standards, but can still meet the Army's physical fitness requirements increases the potential applicant pool and may minimize the readiness risks if the individuals are successful in their attempts to comply with standards.

Each of the above alternatives includes a certain amount of risk, some of which could be mitigated by developing a military occupational specialty for certified trainers. These trainers would work with Soldiers to ensure any weight loss program was executed in safe manner.

Additional alternatives proposed for consideration by a recent study released by the National Bureau of Economic Research included increasing the use of unmanned aircraft, and outsourcing military functions to private security companies rather than relying on active duty personnel.<sup>47</sup> Neither alternative is considered to be a viable solution to the national security concerns caused by the increasing obesity statistics. While the increased use of unmanned aircraft may be of limited value within the Army, it will not provide much relief against significant recruiting issues. Contracting out, or outsourcing, the Army military functions is considered an unacceptable alternative for multiple reasons. First, the effective loss of command and control for predominately military functions is perhaps more detrimental to national security than an obese military. Preparing a contract with sufficient latitude to allow independent action on the



part of the contractor while still maintaining the cost and management control mechanisms required by the Government would require substantial modification to the federal acquisition system and require additional Government personnel in an oversight capacity. Since some of these Government positions would need to be military, the overweight concern is still applicable. A second issue with this recommendation is that it fails to address the underlying cause of the concern; it merely moves the requirement to find “fit” recruits from the Army to the private sector. If the contractor used a relaxed weight-for-height standard the medical cost of overweight contractor personnel would be borne by the Government through the contract price. A third reason to eliminate this alternative is the perception of our allies, and our enemies, when the most powerful nation in the world is required to hire someone to defend it. While this final reason does not directly contribute to the overweight or obesity concerns, its potential impact on national security is significant.

### Recommendations

One of the easiest, and perhaps most effective, measures to evaluate an individual’s obesity is the use of the tape measure to determine the amount of their abdominal fat. This should continue to be used as a primary measurement tool. Army physical training should include a combination of both aerobic training and strength training.<sup>48</sup>

The actions implemented by Lieutenant General Hertling at the training bases are an excellent step towards controlling weight and body fat among our young Soldiers, and a means to assist these Soldiers with overcoming weight issues that may have existed prior to enlistment. The guidance provided at this point in their lives will not help compensate for years of poor habits if it is not reinforced once these Soldiers

graduate from basic training and move on to their first duty stations. In order to continue the changes need to be reinforced by implementing the successful measures throughout the Army.

Physical fitness is only one component of achieving and maintaining proper weight and body fat standards. Although nutrition counseling is included in the Army's physical fitness standards this appears to be an area that receives only minimal attention. Additional emphasis needs to be placed on providing proper nutrition guidance, by a qualified dietitian or nutritionist, on a routine basis.

Another recommendation, which was included in a 2003 Institute of Medicine report, is to change the frequency of weight-for-height and body fat testing from semi-annually to quarterly.<sup>49</sup> This should encourage Soldiers to participate more frequently in physical activity, reducing both their weight and their potential for injury. This report also recommended development of a web-based weight management program that would allow service members to track their weight loss progress and provide the portability and consistency to take with them as their duty stations change. An alternative to an Army (or DOD) developed system would be for the services to enter into a partnership with an existing commercial provider, such as Weight Watchers.

As previously discussed, one of the causes of weight issues within the active duty force is the stress of the current operational tempo. An easily implemented aid in this area is including weight control information as part of the deployment/redeployment processing and ensuring that commanders are aware of this as a potential area of concern upon redeployment.

In addition to any steps the Army takes to manage the weight and fitness of its Soldiers, it must also work with the nation's younger population to help combat childhood obesity. There are several options easily available to assist in this area including Soldiers serving as positive role models for their family members as they incorporate lifestyle adjustments to improve family nutrition and increase physical activity. Opportunities should be explored for installations to work with their local communities to participate in physical activity opportunities such as the "Let's Move!" program. Many military installations already participate in partnership program with their local school districts to assist with education initiatives. It may be possible to expand these already existing relationships to include physical activities.

Regardless of any other actions taken by the military, it is essential that senior leaders understand the potential impacts from on our national security from an increasingly obese population. Only they can create and enforce an environment that encourages healthy habits for their communities.

### Conclusion

The National Strategy Forum identifies a strong, flexible military as a fundamental pillar of national security.<sup>50</sup> In order to fulfill its mission to meet our national security obligation the Army needs to take steps to control obesity within its ranks and to assist the nation in controlling obesity among our youth. The children of today represent the future of our nation and of our military as they grow to adulthood and form the basis of our armed forces. If the children continue to fight a losing battle against obesity and become obese adults, our military may be unable to field an all-volunteer force that is physically fit.

A symbiotic relationship exists between the military and the civilian population; one cannot survive without the other and both sides must work together to combat the obesity epidemic. As Lieutenant General Hertling stated, “As an Army, we are representative of the population we serve, and the population is getting larger. And that is an issue.”<sup>51</sup> His proposal to work with external organizations on his “Soldier Athlete” program as a means to raising national awareness of the obesity epidemic is an excellent example of the future cooperation that is needed to work towards solutions.

## Endnotes

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